

2

Docket No. DAS-101XC2

Serial No. 10/609,113

Amendment to the ClaimsRECEIVED
CENTRAL FAX CENTER

MAY 10 2007

1-24 (canceled).

25 (previously presented). A method of screening a plurality of different *Paenibacillus* isolates for an ability to enhance activity of a toxin complex toxin protein selected from the group consisting of TcbA, TcdA, XptA1, and XptA2, said method comprising obtaining polypeptide samples from said isolates and assaying said samples for said activity.

26 (previously presented). The method of claim 25, said method comprising feeding said polypeptide samples and said protein to test insects for ingestion, feeding said protein to control insects for ingestion, and observing said test insects for increased inhibition as compared to said control insects.

27 (canceled).

28 (previously presented). The method of claim 25, said method comprising growing said isolates in liquid media to produce liquid cultures, obtaining culture broths produced by said isolates and assaying said broths for said activity.

29 (canceled).

30 (previously presented). The method of claim 25, said method further comprising creating a library of clones from at least one of said isolates and assaying at least one of said clones for said activity.

31-32 (canceled).

33 (previously presented). The method of claim 25, said method further comprising assaying at least one of said samples for molecular weight of proteins in said sample.

J:\DAS\DAS-101XC2\PTO\Rcsp2 FOA.doc\DNB/mrc

3

Docket No. DAS-101XC2
Serial No. 10/609,113

34 (previously presented). The method of claim 25 wherein said samples are cell pellets obtained from said isolates.

35 (previously presented). The method of claim 25 wherein said samples are purified polypeptides.

36 (previously presented). The method of claim 26 wherein said feeding comprises providing said samples in nutrient agar to said insects.

37 (previously presented). The method of claim 26 wherein said feeding comprises providing said samples to said insects on nutrient agar plates.

38 (previously presented). The method of claim 26 wherein said feeding comprises incorporating said samples into artificial diet in wells of a plate.

39 (previously presented). The method of claim 38 wherein said insects are larvae.

40 (previously presented). The method of claim 25 wherein said insect is a lepidopteran insect.

41 (canceled).

42 (previously presented). A method of screening polypeptides for an ability to enhance insecticidal activity of a toxin complex toxin protein, wherein said polypeptides are from a *Paenibacillus* isolate, wherein said protein is selected from the group consisting of a TcbA protein, a TcdA protein, an XptA1 protein, and an XptA2 protein, and wherein said method comprises providing said polypeptides and said protein to test insects for ingestion, providing said protein to

J:\DAS\DAS-101XC2\PTO\Resp2 FOA.doc\DNB/mrc

control insects for ingestion, and observing said test insects for increased inhibition as compared to said control insects.

43 (previously presented). The method of claim 42 wherein said method comprises producing a liquid culture of said isolate, obtaining a liquid culture sample from said liquid culture, wherein said polypeptides are in said liquid culture sample, and providing said liquid culture sample to said test insects.

44-51 (canceled)

52 (new). The method of claim 25 wherein said *Paenibacillus* isolates are of one or more species of *Paenibacillus* selected from the group consisting of *chondroitinus*, *alginolyticus*, *larvae*, *validus*, *gordonae*, *alvei*, *lentimorbus*, *popilliae*, *thiaminolyticus*, *curdlanolyticus*, *kobensis*, *glucanolyticus*, *lautus*, *chibensis*, *macquariensis*, *azotofixans*, *peoriae*, *polymyxa*, *illinoisensis*, *amylolyticus*, *pabuli*, and *macerans*.

53 (new). The method of claim 25 wherein said *Paenibacillus* isolates are of one or more species of *Paenibacillus* selected from the group consisting of *thiaminolyticus*, *lentimorbus*, and *popilliae*.

54 (new). The method of claim 42 wherein said *Paenibacillus* isolates are of one or more species of *Paenibacillus* selected from the group consisting of *chondroitinus*, *alginolyticus*, *larvae*, *validus*, *gordonae*, *alvei*, *lentimorbus*, *popilliae*, *thiaminolyticus*, *curdlanolyticus*, *kobensis*, *glucanolyticus*, *lautus*, *chibensis*, *macquariensis*, *azotofixans*, *peoriae*, *polymyxa*, *illinoisensis*, *amylolyticus*, *pabuli*, and *macerans*.

55 (new). The method of claim 42 wherein said *Paenibacillus* isolates are of one or more species of *Paenibacillus* selected from the group consisting of *thiaminolyticus*, *lentimorbus*, and *popilliae*.